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FILING DATE FIRST NAMED INVENTOR APPLICATION NO. ATTORNEY DOCKET NO. γ 09/101,833 01/29/99 HIRAMATSU PM255101 Г **EXAMINER** IM62/0718 PILLSBURY MADISON & SUTRO EVANS, G 1100 NEW YORK AVENUE NW ART UNIT PAPER NUMBER NINTH FLOOR EAST TOWER WASHINGTON DC 20005-3918 1725 **DATE MAILED:**

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

07/18/00

Office Action Summary	Application No. Applicant(s) O9/10/833 Frama Su Examiner Group Art Unit COTYPEY Evans 1725
—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—	
Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIREMONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.	
 Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). 	
Status	
☐ Responsive to communication(s) filed on	
☐ This action is FINAL.	
 Since this application is in condition for allowance except for accordance with the practice under Ex parte Quayle, 1935 	
Disposition of Claims /	
\bigcirc Claim(s) \bigcirc \bigcirc	is/are pending in the application.
	is/are withdrawn from consideration.
☐ Claim(s)	
☐ Claim(s)	
□ Claim(s)	is/are objected to.
∇ Claim(s) $\left(-25\right)$	are subject to restriction or election
/\cdot \	requirement.
Application Papers	Davison BTO 040
 □ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. □ The proposed drawing correction, filed on is □ approved □ disapproved. 	
☐ The drawing(s) filed on is/are objected to by the Examiner.	
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119 (a)-(d)	
 □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d). □ All □ Some* □ None of the CERTIFIED copies of the priority documents have been □ received. □ received in Application No. (Series Code/Serial Number) 	
□ received in Application 10. (ceries Code/Cerial Number)	national Bureau (PCT Rule 1 7.2(a)).
*Certified copies not received:	
Attachment(s)	
☐ Information Disclosure Statement(s), PTO-1449, Paper No.	s) ☐ Interview Summary, PTO-413
□ Notice of Reference(s) Cited, PTO-892	□ Notice of Informal Patent Application, PTO-152
□ Notice of Draftsperson's Patent Drawing Review, PTO-948	□ Other
Office Action Summary	

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

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DETAILED ACTION

This application contains claims directed to more than one species of the generic 1.

invention. These species are deemed to lack unity of invention because they are not so linked as

to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species I, drawn to the embodiment shown in figures 1-6, a multilayer printed wiring

board manufacturing apparatus with a positioning mark on a multilayer printed wiring board with

a carbon dioxide laser and a single scanning head.

Species II, drawn to the embodiment shown in figures 7-11, a multilayer printed wiring

board manufacturing apparatus with a XY table having an embedded light source for positioning.

Species III, drawn to the embodiment shown in figures 12-17, a multilayer printed wiring

board manufacturing apparatus with two or more scanning heads with a beam splitter between the

scanning heads and the processing laser source.

Applicant is required, in reply to this action, to elect a single species to which the claims

shall be restricted if no generic claim is finally held to be allowable. The reply must also identify

the claims readable on the elected species, including any claims subsequently added. An argument

that a claim is allowable or that all claims are generic is considered non-responsive unless

accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

- 2. The claims are deemed to correspond to the species listed above in the following manner:
 - Claims 1-12 drawn to the species disclosed in figures 1-6.
 - Claims 13- 19 drawn to the species disclosed in figures 7-11.
 - Claims 20-25 drawn to the species disclosed in figures 12-17
 - The following claim(s) are generic: None
- 3. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Species I, shown in figures 1-6 and claims 1-12 does not have the technical feature of a X-Y table with an embedded light source as does Species II, nor does Species I have the technical feature of Species III of a beam splitter provided between two scanning heads and a laser processing source. Species II lacks the special technical features of positioning mark(s) in or on a multilayer printed wiring board of Species I and does not disclose the technical feature of Species III of a beam splitter provided between two scanning heads and a laser processing source. Species III lacks the technical features of Species II of an embedded light source in an XY table.

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4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey Evans whose telephone number is (703) -308-1653.

GSE

July 14, 2000

GEOFFREY S. EVANS

PRIMARY EXAMINER